

Stephen Brooks Parrish

4681 Harts Brook Ln., Mulberry, FL 33860 ▪ brooks.parrish@ufl.edu ▪ (352) 494-4638

Education

Doctor of Philosophy in Horticultural Sciences University of Florida	Anticipated December 2025 Gainesville, FL
Master of Science in Horticultural Sciences University of Florida	December 2021 Gainesville, FL
Bachelor of Science in Plant Science University of Florida	December 2019 Gainesville, FL

Experience

Graduate Research Assistant January 2020 – Present
Laboratory of Dr. Zhanao Deng, UF Environmental Horticulture Dept. Balm, FL

- Morphological, cytological, and molecular characterization of caladium somaclonal variants and naturally occurring triploids
- Interploidy and interspecific crosses of lantana to produce new sterile breeding lines
- Initiation and micropropagation of blackberry and caladium breeding lines
- Gene editing using CRISPR-Cas9 in ornamental crops for disease resistance
- Performing lantana transcriptome analysis to identify flower color development and gamete production genes

Teaching Assistant January 2021 – April 2021
Plant Science Capstone Balm, FL

- Work with 42 undergraduate students to help them design, conduct, and present original research projects
- Lead class discussions, grade assignments, and offer constructive feedback

Student Laboratory Assistant March 2018 – December 2019
Laboratory of Dr. Michael Kane, UF Environmental Horticulture Dept. Gainesville, FL

- Assisted with disease-eradicated caladium production (13,000 caladiums/11 varieties), including procedure development for true-to-type caladium production via micropropagation
- Maintained sterile plant cultures through repeated sub-cultures and acclimatized young caladium plants in the greenhouse
- Evaluated plants in the greenhouse to determine somaclonal variation within varieties
- Prepared tissue culture media and performed routine visual screenings for contamination

Production Agriculture Employee January 2010 – March 2018
L&J Farms Trenton, FL

- Managed work crews of 30 contracted workers during a six-week long watermelon harvest season to ensure that only high-quality produce is shipped to consumers
- Operated farm equipment to prepare 200 acres of soil, apply plastic on top of rows, plant watermelons, and till the fields after harvest

Watermelon Trial Assistant Intern
Syngenta Seeds

December 2016 – December 2017
Naples, FL

- Maintained phone correspondence with farmers to set up locations and times of trials
- Harvested 250 watermelons per trial (20-30 trials total) and evaluated their quality based on texture, size, and uniformity to determine if the new products are marketable
- Recorded abnormalities and shared results with North American Trial Manager

Peer-Reviewed Publications

- Parrish, S. B.**, Qian, R., & Deng, Z. (2021). Genome Size and Karyotype Studies in Five Species of Lantana (Verbenaceae). *HortScience*, 56(3), 352-356.
- Qian, R., **Parrish, S. B.**, Wilson, S. B., Knox, G. W., & Deng, Z. (2021). Morphological and Cytological Characterization of Five Porterweed (Stachytarpheta) Selections. *HortScience*, 56(3), 330-335.

Invited Presentations

- Parrish, S. B.** (2021, October). Discovering and developing triploids in caladium, lantana, and porterweed. UF Southwest Florida Green Team Meeting. Balm, FL.
- Parrish, S. B.** (2021, August). Poster: Morphological, Cytological, and Molecular Characterization of New Caladium Somaclonal Variants. The American Society for Horticulture Science Annual Conference. Participated on Zoom.
- Parrish, S. B.** (2021, August). Discovery and Characterization of Triploid Caladium Breeding Lines. The American Society for Horticulture Science Annual Conference. Participated on Zoom.
- Parrish, S.B.** (2021, May). High School Honors Reception Keynote Address. Gilchrist County's Senior Honor's Reception. Bell, FL.
- Parrish, S. B.** (2021, January). Careers in Horticultural Science. Bell High School Agriscience Class. Virtual Presentation Held on Zoom.
- Parrish, S. B.** (2020, October). New Chromosome Numbers in Commercial Cultivars and Breeding Lines and Interploidy Crosses in Caladium. 2020 UF/IFAS Caladium Research Forum. Balm, FL.
- Parrish, S. B.** (2020, October). Morphological and Cytological Characterization of Six Porterweed (Stachytarpheta) Selections. The Florida Society for Horticulture Science Annual Conference. Held on Zoom.
- Parrish, S. B.** (2020, October). Morphological and Cytological Characterization of Six Porterweed (Stachytarpheta) Selections. International Plant Propagators' Society Southern Region Charlie Parkerson Student Research Competition. Held on Zoom.
- Parrish, S. B.** (2020, August). Poster: Cytological and Karyotyping Analysis of Five Lantana Species. The American Society for Horticulture Science Annual Conference. Held on Zoom.
- Parrish, S. B.** (2020, August). Production of Pathogen-Eradicated Caladium Seed Stock Using Meristem-Tip Culture. The American Society for Horticulture Science Annual Conference. Held on Zoom.
- Parrish, S. B.** and Schwartz, A. E. (2018, August). The Science of Social Media. 2018 Florida FFA Chapter Presidents Conference, Orlando, FL.

Leadership & Involvement

American Society for Horticulture Science Member	2020 – 2022
Environmental Horticulture Graduate Student Association Member	2020 – 2022
Department Representative to the UF Graduate Student Council	2021
Plant Sale Advertising Committee	2020
Florida State Horticultural Society Member	2020 – 2021
UF College of Agricultural and Life Sciences Ambassador	2018 – 2019
UF Collegiate Farm Bureau Member	2017 – 2019
Florida FFA Association State President	2015 – 2016

Awards & Recognition

International Plant Propagators' Society Southern Region Charlie Parkerson Student Research Competition, 1 st Place	
Florida Fertilizer and Agrichemical Association Scholarship Recipient	
CALS Muriel Rumsey Scholarship Recipient	
American Floral Endowment Scholarship Recipient	
Southeast Produce Council Scholarship Recipient	
American FFA Degree Recipient	